

Public Health Reports

Treasury Department, United States Marine-Hospital Service. Published in accordance with act of Congress approved February 15, 1893.

VOL. XIV. WASHINGTON, D. C., JANUARY 13, 1899. No. 2.

UNITED STATES.

[Reports to the Supervising Surgeon-General, United States Marine-Hospital Service.]

Sanitary report from San Juan, Puerto Rico.

SAN JUAN, PUERTO RICO, *January 3, 1899.*

SIR: In accordance with your instructions dated December 9, 1898, to proceed to San Juan, Puerto Rico, I arrived at this port upon the 21st ultimo, and beg leave to submit the following report:

Puerto Rico, the fourth in size of the islands of the West Indies, is quadrilateral in shape, a little over 100 miles in length, and 37 miles in width, 972 miles to Key West, 1,175 miles to Port Tampa, and a little over 1,300 statute miles to Hampton Roads. It is separated from Haiti on the west by a strait 70 miles in width. Off the eastern end there are a number of small islands, the largest of which are the Isla Culebra (Snake Island), and Isla de Vieques (Crab Island).

The Indian name for Puerto Rico was Borinquen, which seems prettier and more appropriate than that of the Golden Gate (Puerto Rico). The Island appears to be of volcanic origin, and is traversed from east to west by ranges of mountains of an average height of 1,500 feet, dividing it into two great watersheds, the larger upon the northern side. One peak of these mountains, Yunque, reaches a height of 3,678 feet. There are over 1,300 rivers and streams, 30 to 40 of which are navigable for some distances.

Politically, the island is divided into provinces or districts—Arecibo and Bayamon upon the north, Ponce upon the south, Guayama and Humacayao upon the east, and Aguadilla and Mayaguez to the west.

The principal seaports are San Juan and Arecibo upon the north coast, Ponce and Guanica upon the south, and Aguadilla and Mayaguez upon the west. With the exception of San Juan, most of these are open roadsteads, and vessels are obliged to put to sea in storms.

Guanica, where General Miles first landed, is protected, but has little shipping interests. Special reports will be made upon these harbors in due course, after personal inspection. The population of the island is a little over 800,000, being more densely settled in the western end. Roughly, 60 per cent are white, 30 per cent are mixed, and 10 per cent are negroes. No reliable census of the country, cities, and towns is obtainable, and if the island is included in the coming census of the United States, special information should be sought upon vital statistics, the sanitary history in past years, prevalence of contagious disease, etc., and I recommend that the Bureau invite the attention of the Commissioner of Census to this matter.

The population of some cities is now roughly estimated as follows: Ponce, 40,000; San Juan, 32,000; Arecibo, 11,000; Utuado, 12,000; Mayaguez, 15,000; San German, 18,000; Yauco, 22,000, and Juana Diaz, 18,000, with a number of other towns of over 10,000 inhabitants. The populations given probably include the settled districts surrounding the towns.

Railroads.—Narrow gauge railroads run for comparatively short distances in several detached places. One from San Juan to Arecibo is 86 kilometers long, and continues 14 kilometers farther to Camuy. Another from San Juan to Carolina, 22 kilometers; Aguadilla to Mayaguez, 44 kilometers, and continued 11 kilometers to Homigueros. Between Yauco and Ponce the road is 35 kilometers in length.

A telegraph system connects various portions of the island; was poorly managed, and, I understand, was owned by the government. It is now operated by the Signal Corps United States Army. Puerto Rico is connected with the outside world by cable lines which run to Cuba, Mexico, and Panama; also to St. Thomas, Jamaica. This line is owned by an English company.

Commerce and resources.—In normal times the average entrances of vessels is said to have been 1,919 per year, of 327,941 tons, of which 544 of 81,966 tons were English. The larger number of other vessels were Spanish, German, and American. It is also stated that the total annual imports were about \$7,500,000, and the exports about double that amount; 25 per cent of these estimates were with the United States. Coffee, sugar, and tobacco, are the principal exports, with some hard woods, as ebony, *lignum vitæ*, cedar, and logwood, but pine lumber is scarce, consequently the buildings are mainly constructed of brick, cement, and stone, with charcoal and coke for fuel. Venomous snakes and insects are rare, and the wild dog is the only savage animal. It is also stated that birds and flowers are remarkably scarce.

San Juan, the capital city, is located upon the northern coast a little east of the median line, upon a high bluff and tortuous channel of entrance. It covers an area of about three-fourths by a third of a square mile circumvallated by a stone wall mædial in appearance. The buildings are all of brick and stone, with thick walls and no chimneys, and flat brick and cement roofs. The oldest building, the Casa Blanca, was constructed by Ponce De Leon in 1511.

The average width of the streets is 25 feet, with a cement foot walk upon either side, leaving a stone paved roadway of 17 feet. At least two-thirds of the streets have a fairly steep descent to the water fronts—equal to the incline of the streets leading down from the Capitol Building at Washington. Heavy and frequent showers of rain wash them very clean, and there are no cleaner looking streets in the United States. This is the superficial view; there are no alleys. In the rear courts there are between 1,300 and 1,500 pits and cemented vaults filled

with the excrement of years whose condition is indescribable. They are located next to kitchens and cemented cisterns; the heavy rainfalls overflow them so that the back courts and areaways are afloat.

The water supply of the city at present depends upon these cisterns. Many sewer and water pipes have been laid, and a good water supply system was projected by the municipal authorities. A pumping station, filter beds, and reservoir are constructed at Rio Piedras, 12 kilometers from San Juan, and considerable large water mains laid, but the work was interrupted by the war. An excavation has been started within the city heights for a reservoir. I have recommended that it be abandoned and standpipes used instead, for the reason that they are less expensive, but, principally, that they expose less surface to a tropical sun, besides less danger of animal and vegetable pollution.

The situation of the city and the sanitary engineering problems connected therewith are ideal, despite the incrustated filth and hereditary habits of the people. Now all the conditions of soil, temperature, moisture, etc., are favorable for the propagation of contagious and infectious diseases, only the germ being absent.

No city board of health is in existence; some appearance at vital statistics is kept at a local court, and the average death rate is stated to be about 28 per thousand.

Gen. Guy V. Henry has detailed Capt. L. P. Davison, an energetic officer of the Regular Army, to organize a superior board of health for San Juan, which shall have jurisdiction over similar boards in other parts of the island. This board will consist of Captain Davison, Fifth Infantry, executive officer and sanitary inspector of the island; the health officer of the port, the health officer of the city, two members of the city council, and the medical officer of the United States Marine-Hospital Service as advisor to the board, with supervision of the port inspections. The main attention of the board will be devoted to municipal sanitation, and it is hoped that good results will follow. General Henry has asked for an allotment of money from the customs receipts for the purpose.

Quarantine establishment.—In 1876 the English brig *Orange* arrived at San Juan from St. Thomas with a clean bill of health and no sickness on board. In the course of a few days two of the crew sickened with yellow fever. This stimulated the authorities to establish a lazaretto, and on July 16, 1876, an appropriation of 14,013 pesos was made for this purpose. A commission, consisting of members of the city council, physicians, and a sanitary engineer, selected the Isla del Cobras for a quarantine site, and the Spanish Government granted the concession. The first stone was laid by Governardo el Generale Segunde de la Portella December 17, 1876, and the work was completed September 15, 1877. Don Valentine Saez constructed the buildings for a little over the appropriation already mentioned, but the institution was closed July 25, 1878, for lack of funds. I inclose a very good tracing of the island and buildings furnished me through the kindness of Dr. Pedro del Valle.

The Isla del Cabras (Goat Island) is situated at the entrance of the bay opposite to Morro Castle, and is about a half statute mile in length by less than an eighth of a mile in width. It is unapproachable upon the northern and city sides on account of surf, rocks, and breakers, which have nearly divided the island in two places. On the western side it is reached only by small boats drawing not more than 3 feet of water, the rise and fall of the tide being about 18 inches. Here there is a wharf 9 feet wide and 50 feet long headed by a "Tee." Proceeding up this wharf and to the right there is an 18-inch iron track lead-

ing to a disinfection building, 12 by 18 feet, with corrugated iron roof and cement floor. In this building there is a single wall cylindrical steam chamber 5 by 9 feet, without gauge or coil pipes, the steam being turned direct into the chamber. A wooden partition divides the compartment; alongside, under a shed, a small upright steam boiler is erected, about 2 by 5 feet in diameter. The clothes rack for the chamber is a half circle wooden sliding rack through end doors of the Valk pattern. The apparatus was constructed in Paris, received about three years ago, but not set up until a month ago, when the passengers upon the transport *Mississippi* were detained here on account of a case of yellow fever. Considerable clothing was damaged, on account of faulty construction and lack of experience in management. Still farther to the right is a large warehouse building 50 by 50 feet with corrugated iron roof and cement floor. All of the buildings upon the island save one are of substantial stone or brick and cement walls, the exception being a small decayed frame house formerly used as a telegraph station.

Proceeding some little distance to the left of the wharf, up a high bluff, there is a building 15 by 25 feet, for use as a dispensary and keepers' quarters. Thirty feet from here is an imposing structure about 45 by 90 feet, with five brick and cement arches upon the latticed sea-end, and eight arches upon the sides. This incloses a surrounding flag-paved corridor, within the thick walls of which are two large rooms with 16-foot ceilings. The roofs are flat brick and cement. My measurements are taken by eye and pacing, and a minute description is given in order to afford an idea of the substantial construction. At one corner a small kitchen is attached, with brick benches for charcoal fires. Cement laundry tubs are placed upon the edge of the bluff. The water supply is entirely from cisterns, with no hand pumps.

A few hundred yards farther is the "lazaretto," with central concrete floor hall, two wards upon one side and four small rooms upon the other, detached kitchen, etc. A wooden picket fence isolates this end of the island; the cemetery contains three graves—one of a sea captain, who died of smallpox several years ago. A number of old cots and a few rusted utensils constitute the entire furniture upon the island. It will thus be seen that some idea has obtained as to the formation of a detention camp and isolation hospital, without conveniences and effectiveness. Disinfection of vessels at the wharf is out of the question, as they can not approach within a mile, and there is no other island or isolated wharf available. The work will have to be performed by a floating barge.

Port inspection.—Upon the United States assuming control of the island, Dr. Pedro Del Valle was appointed port physician by the military authorities. His salary is paid out of the customs receipts. Dr. Del Valle is a native of the Island, a graduate of the medical department University of Michigan, and speaks English quite fluently.

There are two yawl boats of 20 and 30 feet each for boarding purposes, manned by 6 sailors and coxswain, in white sailor uniforms. Upon their cap is inscribed "Sanidad Maritima." Nearly all vessels are inspected by daylight; although the light houses have not yet been relit, there are some French and Spanish steamers which know the channel, and require a night inspection. I have boarded several vessels with the port physician, and observed the methods pursued.

The records of inspections are complete and interesting. In the book entitled "Entradas," with printed headings, is a full sanitary history of the vessel, cargo, crew, passengers, ports of departure, destination, etc., and in a book entitled "Salidas," are recorded the depar-

tures. The following are the entries for the past three years: In 1896, 401 vessels; in 1897, 360; and in 1898, 320. Coastwise vessels around the island are not inspected, unless there is a special reason.

The average rise and fall of the tide is 18 inches, the harbor land-locked, and a good naphtha launch should be substituted, with two attendants, watchman and lookout, instead of the present heavy yawl boat, requiring 7 or 8 men to man it. A daily report of all arriving and departing vessels is made to the military authorities. I am supervising the inspections as you directed, and directing the issue of bills of health. The weekly report of arrivals and departures will be forwarded regularly.

Marine hospital relief.—There is one Puerto Rican steamer and about 40 small sailing vessels which ply around the island, which, with the rapidly increasing number of arrivals of vessels of American register, will no doubt require special arrangements for our sick and disabled seamen. I reserve this subject for a future report.

The large substantial building used as an army hospital was erected with contributions collected by the archbishop and turned over to the Spanish military authorities with the proviso that 30 beds should be reserved for the care of city cases. The city therefore has an equity right in the building, although our forces removed these patients to other quarters. There is also a small private hospital in which foreign seamen are cared for at a charge of about \$1.50 a day.

Prevalence of disease.—Malarial fever (palustra) exists in a mild form throughout the island, with which typhoid is often confused, as I have observed in our own southern States. Yellow fever is not endemic, nor am I aware of a case upon the island, yet there is no reason why it can not be easily introduced and readily propagated. A suspicious death occurred at Mayaguez in September, and possibly a case at Ponce in August. They were introduced by the troops, and there was no further spread. I will make further report upon this subject.

There is a strong and decided objection to transport steamers touching here upon their return from Cuban ports, en route to the United States, as was recognized in the Bureau before I left Washington. Colonel Hoff, chief surgeon of the forces whom I have known for, some years, informs me of their strong objections to this system. It is dangerous, not a military necessity, and safe rigid restrictive measures can not be exercised upon them in these harbors under the system in which they are now managed. I urgently recommend that the special attention of the Secretary of War be invited to this important matter.

About four years ago, a Spanish troop ship introduced smallpox, and it has been more or less prevalent since that time. The Old Spanish smallpox barracks within the city limits were destroyed by fire yesterday, thereby removing a great source of danger.

Several years ago (about 1890), a troop ship also brought yellow fever into this port. It prevailed extensively in the barracks, with a number of deaths, but it is said not to have spread throughout the city. From the nature of the native population, the disease would be mild, and they are probably immune.

Special reports will be made upon the ports of Ponce and Mayaguez at the earliest date possible.

In the few vessels which I have boarded in this harbor, I have noticed a number of immigrants from St. Thomas and the neighboring islands. The influx of this foreign population is distasteful to the Puerto Ricans, and I contemplate inviting the attention of General Henry to this matter, and the national immigration laws connected with the subject.

Respectfully submitted,

A. H. GLENNAN,
Surgeon, U. S. M. H. S.

Influenza (la grippe).—Continued.

ABSTRACT OF REPLIES RECEIVED.

Ashtabula, Ohio.—Ten cases, very mild in type. No mortality.

Beaufort, N. C.—La grippe has not appeared in this place, so far as known.

Brunswick, Ga.—No cases have been observed since last winter, during which season there occurred a few cases of a mild character, none terminating fatally. The treatment the same as that for cold.

Chicago, Ill.—Influenza of a mild type is prevalent, but is not considered epidemic by the health officials. Physicians are not required to report this form of disease; hence the number of cases has not been ascertained. It is estimated at about one thousand. The commissioner of health states that from December 2 to 28 eleven certificates of death were returned giving grippe as the determining cause of death. The germ of influenza has been bacteriologically verified in one case. As grippe is considered contagious, the health authorities recommend isolation of the patient as far as possible; that close contact with persons suffering from the disease be avoided, no article or utensil being used in common with them; that articles used for receiving secretions from the nose, mouth, and throat be burned and the room, clothing, and bedding be disinfected.

Cleveland, Ohio.—Grippe or influenza is extremely prevalent in this locality. It is estimated that not less than 25 per cent of the population are suffering from the disease. The type is extremely mild. No mortality is reported. The treatment is wholly symptomatic.

Columbus, Ohio.—The first case of grippe appeared during the first week in December. Since that date about one-fourth of the population has been affected by it. At present about 10 per cent are sick with the malady. It is in a mild form, of catarrhal fever type. Three deaths are reported. The treatment is by quinine. Public sanitary measures have not been adopted.

Darien, Ga.—Grippe has been generally prevalent about six or eight weeks, and is confined largely to the colored race. It is of very mild type, yielding to simple remedies, and the mortality is very small. Uncomplicated bronchitis seems to be the most pronounced symptom.

Denver, Colo.—There are many cases, mild in type, which physicians designate "la grippe." There is practically no mortality from it. Only one specimen submitted for bacteriological examination has been found to contain the influenza bacillus.

Detroit, Mich.—La grippe has been epidemic since December 1. During this period there have been about 5,000 cases conforming to two general types; one, nasopharyngeal with formation of pseudodiphtheritic membrane on tonsils and uvula, the other, gastrointestinal. Mortality has been light. The treatment is medicinal. The epidemic seems to be decreasing in severity.

Erie, Pa.—A great many cases are reported by physicians of Erie City and County. The health officer has no record of the cases and the number can not be definitely stated. No mortality has as yet been reported. Medicinal treatment accompanied by nerve and heart stimulants.

Fernandina, Fla.—Grippe or influenza has not made its appearance in this locality.

Gloucester, Mass.—Grippe appeared here about one week ago and there are now 90 cases. The type is mild and there has been no mortality, and the epidemic is not considered as severe as in previous years. Ordinary medicinal treatment is followed.

Grand Haven, Mich.—No grippe, properly so-called, in this place.

Lacrosse, Wis.—There is a general epidemic of influenza or grippe in rather a mild form. No deaths have been reported. No attention has been given to sanitation, and no report of cases is made to the board of health.

Little Rock, Ark.—No cases observed up to the present time.

Ludington, Mich.—There were a few cases, not severe, some weeks ago, but at present there are practically no cases of the disease in the city other than one in the person of a Member of Congress, who contracted it in Washington, D. C.

Manistee, Mich.—Influenza is prevalent and increasing considerably. Treatment is symptomatic, with isolation whenever possible.

Marquette, Mich.—No cases have been observed nor have any been reported at the city health office.

Milwaukee, Wis.—A few cases, mild in type.

New London, Conn.—Grippe has been epidemic for about one month. The type of the disease has been well marked, but the mortality has been very low.

Ogdensburg, N. Y.—Grippe appeared about December 15 and has been increasing. About 200 cases are observed. The type of the disease is mild. No sanitary treatment is followed.

Port Huron, Mich.—A few sporadic cases exist, but the disease is not prevalent to any extent.

Portland, Me.—No cases have been observed which are fairly entitled to the designation of grippe. No deaths from grippe have been reported.

Port Tampa, Fla.—No decided cases of grippe present. A great many cases of slight coryza and bronchitis are observed. No mortality.

Saginaw, Mich.—A few cases of a mild type have occurred during the past week. There have been no deaths from the disease, as far as known, and no sanitary treatment is adopted.

Sand Beach, Mich.—There is no marked character in the few colds in this locality.

Solomons, Md.—No cases of influenza or grippe have appeared in this

locality. Two cases have been observed in the persons of seamen, who had recently left Baltimore. They were of the catarrhal type.

South Atlantic Quarantine Station, Ga.—Grippe is not epidemic in this locality.

Southport Quarantine, N. C.—No cases of influenza or grippe have appeared at Southport.

Toledo, Ohio.—At the commencement of the winter, isolated cases of grippe were observed. These gradually increased in number and severity and at present the disease may be designated as epidemic. The number of cases can not be stated, as the board of health does not require a report of this disease. The mortality is light, only 3 deaths having been reported since October 1. No sanitary treatment other than cleanliness and partial isolation is recommended.

Washington, N. C.—Grippe is not yet prevalent in this section, though a few isolated cases have occurred. Mortality is very low.

Wilmington, N. C.—Grippe is practically epidemic in this city, and has been for several weeks. The type is mild, and no death has been attributed to it as far as can be ascertained. Sanitary treatment is usually neglected. It is confined to the housing of the patient and the use of creosote, vapo-cresolene, or some similar vapor in the room.

Report on the smallpox situation in Norfolk and Newport News, Va.

CAPE CHARLES QUARANTINE, *January 6, 1899.*

SIR: I have the honor to report that in obedience to your orders (P. M. C.) of the third instant I visited Norfolk, Va., to-day and held a meeting with Dr. Newbill, president of the board of health. The present epidemic began with the case of a negro woman who was found ill with smallpox on September 19 last. Her brother had escaped from the county pesthouse while sick with the disease and came to her house in Norfolk. There have been 123 cases in all, with a mortality of 4, showing a very mild type of the disease. Only 5 of these cases have been whites. Eighty of the 123 cases are now in pesthouse. Isolation and compulsory vaccination were instituted from the start. The board has been very much embarrassed by cases coming into Norfolk from the outlying suburbs in the country, where there seem to be many cases among the negroes. I saw a case to-day that had just entered the city from the country. A house-to-house inspection is being done daily by 10 inspectors, and all suspicious cases are at once sent to the pesthouse and the house thoroughly disinfected. The board of health is taking every precaution to prevent the further spread of the disease, ably assisted by the mayor of the city. It is the floating population among the negroes that is giving them the trouble and anxiety.

January 7: Consulted with Dr. Bagby, health officer at Newport News, and found there were 5 cases there, all isolated and guarded in the pesthouse. First case was discovered on November 16; second case, December 25. Contagion thought to have been acquired in Norfolk. All patients are negroes. General vaccination was begun at once, and arrangements are now being made to make it compulsory.

Three of the cases came into the city from the country and had to be taken care of by the city. Every effort is being made to stamp out the disease, which they hope to accomplish.

Very respectfully,

W. J. PETTUS,
Passed Assistant Surgeon, U. S. M. H. S.

Smallpox in Mobile, Ala.

MOBILE, ALA., *January 3, 1899.*

SIR: I have the honor to report that a colored man, age 20, was admitted to the pesthouse yesterday suffering with confluent smallpox. He had been in the city for nine days, having come from Gastonburg, Wilcox County, Ala. He states (what I have suspected for a long time) that there are many cases of the disease in the county, and that no public action has been taken in the way of restriction or prevention. Gastonburg is on the Mobile and Birmingham Railroad, 129 miles north of Mobile.

Respectfully, yours,

R. D. MURRAY,
Surgeon, U. S. M. H. S.

Smallpox in Mobile, Southside, Collerine, and Catherine, Ala.

MOBILE, ALA., *January 6, 1899.*

SIR: I have the honor to report that the second case of smallpox, in a colored man, was discovered in this county near the city limits on the 4th instant and sent to the pesthouse yesterday. The man arrived here on the 1st from Selma, where the disease has existed for some time. On one plantation at Southside, near Selma, 88 negroes have recovered, and on another there are 8 cases. A young white man is sick with the disease at Collerine, Lowndes County. There are cases at Catherine, Wilcox County.

Respectfully, yours,

R. D. MURRAY,
Surgeon, U. S. M. H. S.

Smallpox at Bethel and Media, Ill.

SPRINGFIELD, ILL., *January 7, 1899.*

SIR: I have the honor to inform you that 2 cases of smallpox exist at Bethel, Morgan County. Source of infection, St. Louis; type, mild. One case exists also at Media, Henderson County; type, mild. Source of infection: First case reported at Biggsville, December 16. All cases quarantined. Disease not likely to spread. Total cases to date: Biggsville, 9; Media, 1; Bethel, 2. Confluent, 3; discrete, 1; varioloid, 8. No deaths.

Very respectfully,

J. A. EGAN, M. D.,
Secretary Illinois State Board of Health.

Smallpox in Nebraska.

LINCOLN, NEBR., *January 9, 1899.*

SIR: Your letter of recent date is at hand. The Nebraska State board of health is solely a licensing board. We have never been granted authority to intervene in matters of sanitation, and no funds are provided by the State for such purposes.

When the outbreak of smallpox in Nebraska City began in September,

the cases were all so mild that there was some doubt among the local physicians about its being truly smallpox. The physician on the local board of health at the behest of the newspapers, and some of the business people, took strong grounds against the smallpox theory. Gradually every other practitioner there became positively convinced that it was really smallpox, and some vaccination was done among the better classes, and also the employees of the cereal mills, the largest industrial plant in the place. However, the doctors found the local board of health opposed to all sanitary measures recommended and about December 8 they appealed to the State board to intervene and at least assume some authority to help them control what then seemed to have resulted in a persistent epidemic. At that time, December 8, I visited the place and, according to the best information I could obtain about 200 cases had occurred (some said 300 to 400) and 2 deaths had occurred, 1 in a male adult and 1 in an infant. I found the health doctor still bitterly opposed to the theory of smallpox, and learn that he has since pursued the same course, and aided the newspapers to suppress the truth about the matter. I inclose a copy of *The Press* of the date of December 29 which still denies it. Our board, with the consent of the governor, sent an inspector down there on December 12, giving him strict injunctions as to isolation, vaccination, etc. They at once built a hospital and have had 20 to 30 cases in it constantly since. But 1 death has occurred since the last-named date, a child of 8, with confluent smallpox. From 6 to 8 new cases per week are now reported. About 30 per cent of the population are unvaccinated. The farmers around the city have a number of cases, how many I do not know, but several points of infection exist and no sanitary supervision whatever exists. The county commissioners have refused to burn infected feather beds and clothing in one instance. All other towns in Nebraska where the infection has occurred are now free from it excepting that one new case is reported to-day at Tecumseh. I believe that the moral effect would be good if you could send a man out there to investigate.

Yours truly,

B. F. CRUMMER,
Secretary Nebraska State Board of Health.

Smallpox in Nebraska—Inspector's reports.

NEBRASKA CITY, NEBR., *January 2, 1899.*

SIR: On reaching this city, December 12, as medical inspector representing the Nebraska State board of health, I found in progress and under good quarantine regulation—smallpox, 63 cases. There have been found about 2 cases daily, on the average, to date, 110 cases in all in the three weeks. Since Thursday, the 29th, no new family has been quarantined. Four new cases have developed in infected families. I have seen, also, at Tecumseh, Nebr., 9 cases; Peru, Nebr., 5 cases, that probably escaped from here. The cases at Tecumseh certainly did.

Our State law is very incomplete, in fact we have none except in city charters. Disinfection outside the jurisdiction of a city board of health must be incomplete. No one having authority to destroy infected material, and a feather bed is often an heirloom of great importance. The attending physician will be censured, if thorough and if not.

We hope for State legislation immediately giving our State board some authority in such cases. We believe with our isolation hospital, good quarantine, and formaldehyd for disinfection, by strict method, sheet and spray, we are accomplishing something, as our lack of new

infected houses would indicate. In the country round, the same care can hardly be taken, however. No vaccination law exists.

Very respectfully,

SOLON R. TOWNE,
Medical Inspector.

NEBRASKA CITY, NEBR., January 7, 1899.

SIR: Upon the smallpox situation I have to report during the last twenty-four hours 3 cases in infected houses, 2 new families a single case, with suspicious third family. People coming into city from infected families in country without disinfection proper of person or clothing.

Schools will open January 16 unless something severe occurs next week.

County commissioners are serving notice on infected families to remain on premises, to send errands to town, not to approach another person nearer than 20 feet, all until proper disinfection. How to vaccinate school children and others, I do not know. I tell the school board they can exclude from school all not immune, yet they still hesitate.

Very respectfully,

S. R. TOWNE, M. D.,
Inspector State Board.

Smallpox in the United States as reported to the Supervising Surgeon-General United States Marine-Hospital Service, December 31, 1898, to January 18, 1899.

Places.	Date.	Cases.	Deaths.	Remarks.
Alabama:				
Catherina.....	Jan. 6.....	.....	.....	Smallpox reported.
Collerine.....	.....do.....	1	.....
Mobile.....	Jan. 2-Jan. 4.....	1	.....
Southside.....	Jan. 6.....	96	.....
Colorado:				
Pueblo.....	Dec. 17-Dec. 31.....	16	4	
Illinois:				
Bethel.....	Jan. 7.....	2	.....
Media.....	.....do.....	1	.....
Michigan:				
Detroit.....	Jan. 1.....	4	.....
Minnesota:				
Minneapolis.....	Dec. 8.....	1	.....
Nebraska:				
Nebraska City.....	Sept. 1-Jan. 7.....	220	2	
Omaha.....	Jan. 1-Jan. 7.....	1	.....
Peru.....	Jan. 2.....	5	.....
Tecumseh.....	.....do.....	9	.....
New Jersey:				
Jersey City.....	Dec. 5-Jan. 1.....	2	.....
Oklahoma:				
Chandler.....	Dec. 30.....	1	.....
Doggett.....	.....do.....	1	.....
Parkland.....	.....do.....	1	.....
Sac and Fox Agency.....	.....do.....	2	.....
Stroud.....	.....do.....	.....	3	
Pennsylvania:				
Ball Hill.....	Dec. 31.....	1	.....	Do.
Charlesville.....	.....do.....	.....	.....
East Vincent Township.....	.....do.....	1	.....
Everett.....	.....do.....	3	.....
Homer City.....	.....do.....	2	.....
Hopewell.....	.....do.....	3	.....
Hustontown.....	.....do.....	4	.....
New Granada.....	.....do.....	7	.....
Pittsburg.....	.....do.....	1	.....
Steeltown.....	.....do.....	11	.....
Waterfall.....	.....do.....	1	.....
Virginia:				
Alexandria.....	Jan. 4.....	3	.....
Newport News.....	Dec. 31.....	4	.....
Norfolk.....	.....do.....	10	.....
Wyoming:				
Rock Springs.....	Dec. 24.....	1	.....

Report of immigration at Boston for the week ended December 31, 1898.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
Port of Boston, January 1, 1899.

Number of alien immigrants who arrived at this port during the week ended December 31, 1898 ; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of immigrants.
Dec. 25	Steamship Ottoman.....	Liverpool, England.....	11
Do....	Steamship Boston.....	Yarmouth, Nova Scotia.....	38
Do....	Steamship Dominion.....	Liverpool, England.....	55
Dec. 26	Steamship Baltimore.....	do.....	7
Do....	Schooner Comrade.....	St. Martins, New Brunswick.....	1
Dec. 27	Steamship Ethelred.....	Bowden, Jamaica.....	4
Do....	Steamship Cestrian.....	Liverpool, England.....	23
Dec. 28	Steamship Prince George.....	Yarmouth, Nova Scotia.....	63
Do....	Steamship Barrowmore.....	London, England.....	3
Dec. 29	Steamship Halifax.....	Halifax, Nova Scotia.....	14
Do....	Steamship Boston.....	Yarmouth, Nova Scotia.....	46
Do....	Steamship Kansas.....	Liverpool, England.....	10
Dec. 31	Steamship Prince George.....	Yarmouth, Nova Scotia.....	59
Do....	Steamship New England.....	Liverpool, England.....	65
	Total.....		399

GEORGE B. BILLINGS,
Commissioner.

Report of immigration at Boston for the week ended January 7, 1899.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
Port of Boston, January 8, 1899.

Number of alien immigrants who arrived at this port during the week ended January 7, 1899 ; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of immigrants.
Jan. 1	Steamship Boston.....	Yarmouth, Nova Scotia.....	70
Do....	Steamship Pavonia.....	Liverpool, England.....	17
Jan. 2	Steamship Bay State.....	do.....	17
Do....	Steamship Etolia.....	Avonmouth, England.....	6
Do....	Steamship Sarmatian.....	Glasgow, Scotland.....	2
Jan. 3	Steamship Prince George.....	Yarmouth, Nova Scotia.....	9
Do....	Steamship Assyria.....	Hamburg, Germany.....	54
Jan. 5	Steamship Halifax.....	Halifax, Nova Scotia.....	29
Do....	Steamship Boston.....	Yarmouth, Nova Scotia.....	58
Jan. 6	Steamship Prince George.....	do.....	38
Jan. 7	Steamship Philadelphian.....	Liverpool, England.....	16
	Total.....		316

GEORGE B. BILLINGS,
Commissioner.

Report of immigration at New York for the week ended December 31, 1898.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
Port of New York, December 31, 1898.

Number of alien immigrants who arrived at this port during the week ended December 31, 1898; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of immigrants.
Dec. 25	Steamship Etruria.....	Liverpool and Queenstown.....	74
Dec. 27	Steamship Anchoria.....	Glasgow.....	25
Do.....	Steamship Roland.....	Bremen.....	63
Do.....	Steamship La Normandie.....	Havre.....	242
Do.....	Steamship Pretoria.....	Hamburg.....	415
Do.....	Steamship Patria.....	Marseilles and Naples.....	571
Dec. 28	Steamship Westernland.....	Antwerp.....	150
Do.....	Steamship Spaarndam.....	Rotterdam and Boulogne.....	289
Dec. 29	Steamship Aller.....	Genoa.....	292
	Total.....		2,071

THOMAS FITCHIE,
Commissioner.

Report of inspection of immigrants at the port of New York during December, 1898.

NEW YORK, *January 6, 1899.*

Number of steerage passengers examined during the month, 15,775; rejected as suffering from loathsome or dangerous contagious diseases and detained pending action of the commissioner of immigration, 2. Favus—admitted, 1; deported, 0; remaining, 0. Trachoma—admitted, 1; deported, 1; remaining, 0.

The case of favus was discharged to father, United States citizen.

Respectfully submitted,

J. H. WHITE,
Surgeon, U. S. M. H. S.

Report of inspection of immigrants at Portland, Me.; during December, 1898.

PORTLAND, ME., *December 31, 1898.*

SIR: I have the honor to transmit herewith the following report of inspection of immigrants during the month of December, 1898:

Name of vessel.	Date of inspection.	Number of immigrants.	Rejected.	Held for further examination.
Peruvian.....	Dec. 9.....	7	0	0
Mongolian.....	Dec. 16.....	61	0	0
Numidian.....	Dec. 26.....	63	0	0
Total.....		131	0	0

Very respectfully, yours,

F. W. MEAD,
Surgeon, U. S. M. H. S.

Report of the inspection of immigrants at Portland, Oreg., for the month of December, 1898.

Date.	Vessel.	Where from.	No. of immigrants.
Dec. 12	Steamship Columbia.....	Yokohama, Japan.....	30
	Total.....		30

All passed.

RUPERT BLUE,
Passed Assistant Surgeon, U. S. M. H. S.

Sickness on the American schooner Helen M. Atwood.

BRUNSWICK QUARANTINE, *January 9, 1899.*

SIR: Relative to the case of the American schooner, *Helen M. Atwood*, from Daiquiri, province of Santiago de Cuba, and via Nassau to Brunswick, Ga., I have the honor to state for your information the cases of sickness that appeared on board the *Atwood* prior to her arrival at Nassau were diagnosed by the attending physician at Nassau as malarial fever. They took the precaution, however, to disinfect the vessel and detain crew in hospital at quarantine.

Upon her arrival here all of the crew except two shipped in Nassau gave evidence of having been sick. One man still had fever, intermittent in character, and evidently of malarial origin.

The captain stated that none of the crew were ashore at Daiquiri, and that no one was aboard the vessel except a physician, who was called to attend the steward, who had "cramps." After being out several days' sail from Daiquiri, all on board were sick.

The vessel has been thoroughly disinfected at this station, the clothing, etc., disinfected by steam. The case of malaria promptly recovered under free administration of quinine.

Respectfully, yours,

R. E. L. BURFORD,
Sanitary Inspector, U. S. M. H. S.

REPORTS FROM NATIONAL QUARANTINE

Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
Alexandria, Va.....	Jan. 7	.....	.....	.....
Beaufort, N. C.....	.....	.....	.....	.....
Brunswick, Ga.....	Jan. 7	Am. sc. Helen M. Atwood.	Jan. 6	Daiquiri, Cuba, via Nassau.
Cape Charles, Va.....	do.	.....	.....	.....
Cape Fear, N. C.....	do.	.....	.....	.....
Delaware Breakwater Quarantine, Del.	Dec. 24	.....	.....	.....
Eureka, Cal.....	do.	.....	.....	.....
Do.....	Dec. 31	.....	.....	.....
.....	do.	.....	.....	.....
Grays Harbor, Wash.....	do.	.....	.....	.....
Gulf Quarantine, Ship Quarantine, Miss.	do.	Am. sc. James Slater (a)	Dec. 21	Habana.
Honolulu, Hawaiian Islands.....	Dec. 24	.....	.....	.....
Newbern, N. C.....	Jan. 7	.....	.....	.....
Port Townsend, Wash.....	Dec. 31	.....	.....	.....
Reedy Island Quarantine, Del.....	Jan. 7	.....	.....	.....
San Diego, Cal.....	Dec. 31	.....	.....	.....
San Francisco Quarantine, Cal.....	Dec. 24	.....	.....	.....
San Juan, Puerto Rico.....	Dec. 31	.....	.....	.....
South Atlantic Quarantine Blackbeard Island, Ga.	do.	Br. sc. John S. Parker (a)	Dec. 20	Habana.
Tortugas Quarantine, Key West, Fla.	do.	.....	.....	.....
Washington, N. C.....	Jan. 7	.....	.....	.....

a Previously reported

REPORTS FROM STATE AND

Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
Anclote, Fla.....	Jan. 7	.....	.....	.....
Baltimore, Md.....	do.	.....	.....	.....
Bangor, Me.....	do.	.....	.....	.....
Boston, Mass.....	do.	.....	.....	.....
Carabelle, Fla.....	do.	.....	.....	.....
Charleston, S. C.....	do.	.....	.....	.....
Charlotte Harbor, Fla.....	do.	.....	.....	.....
Elizabeth River, Va.....	do.	.....	.....	.....
Galveston, Tex.....	do.	.....	.....	.....
Gardiner, Oreg.....	do.	.....	.....	.....
Key West, Monroe County, Fla.....	do.	.....	.....	.....
Los Angeles, Cal.....	Dec. 31	.....	.....	.....
Mobile, Ala.....	do.	.....	.....	.....
New Bedford, Mass.....	Dec. 24	.....	.....	.....
Newport News, Va.....	Jan. 7	.....	.....	.....
Newport, R. I.....	.....	.....	.....	.....
Pass Cavallo, Tex.....	Jan. 7	.....	.....	.....
Providence, R. I.....	do.	.....	.....	.....
Round Island, Miss.....	Dec. 31	.....	.....	.....
San Pedro, Cal.....	do.	.....	.....	.....
Savannah, Ga.....	Jan. 7	.....	.....	.....
Tampa Bay, Fla.....	do.	.....	.....	.....

AND INSPECTION STATIONS.

Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
			No transactions.....	
			No report.....	
Brunswick.....	Disinfected and held.....		8 sick of fever after leaving Daiquiri; 2 died in hospital at Nassau; 1 case of malarial fever on arrival.	5
			No report.....	3
			No transactions.....	
			Do.....	
Pascagoula.....	Disinfected and held.....	Dec. 27	1 case yellow fever in port of departure.	2 6
			No transactions.....	5
				4
				19
				2
				8
				10
Jacksonville.....	Disinfected and held.....	Dec. 26	2 cases malarial intermittent fever.	3
			No report.....	
			No transactions.....	

MUNICIPAL QUARANTINE STATIONS.

Destination.	Treatment of vessels, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
			No report.....	
				15
			No report.....	
			do.....	
			do.....	4
			No report.....	3
			do.....	
				22
			No transactions.....	
				17
				1
				4
			No report.....	
			do.....	
			No transactions.....	
				3
			No report.....	
				14
			No report.....	

Reports of States and yearly and monthly reports of cities of the United States.

CALIFORNIA—*San Francisco*.—City and county, month of November, 1898. Estimated population, 360,000. Total number of deaths, 350, including diphtheria, 6; enteric fever, 15; measles, 2, and 49 from phthisis pulmonalis.

CONNECTICUT—*Hartford*.—Month of December, 1898. Estimated population, 72,000. Total number of deaths, 108, including diphtheria, 8; enteric fever, 5; whooping cough, 1; grippe, 5, and 10 from phthisis pulmonalis.

HONOLULU—*Hawaiian Islands*.—Month of November, 1898. Estimated population, 20,487. Total number of deaths, 93, including enteric fever, 1; measles, 1; beriberi, 1, and 7 from phthisis pulmonalis.

MICHIGAN.—Reports to the State board of health, Lansing, for the week ended December 31, 1898, from 65 observers indicate that inflammation of kidney increased and enteric fever decreased in area of prevalence. Phthisis pulmonalis was reported present at 142, scarlet fever at 43, enteric fever at 43, diphtheria at 19, whooping cough at 18, measles at 15 places, and smallpox at 1 place—Detroit.

Port Huron.—Month of October, 1898. Estimated population, 20,000. Total number of deaths, 19, including 3 from phthisis pulmonalis.

Month of November, 1898. Total number of deaths, 17, including enteric fever, 2; scarlet fever, 1, and 2 from phthisis pulmonalis.

MASSACHUSETTS—*Fitchburg*.—Month of December, 1898. Estimated population, 29,438. Total number of deaths, 36, including enteric fever, 2; scarlet fever, 1; whooping cough, 1, and 3 from phthisis pulmonalis.

MISSOURI—*St. Louis*.—Month of November, 1898. Estimated population, 623,000; white, 587,000; colored, 36,000. Total number of deaths, 737; white, 659; colored, 78, including diphtheria, 37; enteric fever, 7; scarlet fever, 1; whooping cough, 3, and 100 from phthisis pulmonalis—white, 84; colored, 16.

NORTH CAROLINA.—Reports to the State board of health for the month of November, 1898, from 24 towns having an aggregate population of 164,288; white, 93,648; colored, 70,640; show a total of 207 deaths, including enteric fever, 8; scarlet fever, 1, and 30 from phthisis pulmonalis. There was an outbreak of smallpox in Edgecombe County, with 20 cases, 13 white and 7 colored. The contagion was brought from Norfolk, Va.

OHIO.—Reports to the State board of health for the nine weeks ended December 3, 1898, from 93 localities having an aggregate population of 1,314,354, show 114 deaths from diphtheria, 85 from enteric fever, 17 from scarlet fever, 1 from measles, and 3 from whooping cough.

Toledo.—Month of December, 1898. Estimated population, 151,520. Total number of deaths, 122, including diphtheria, 3; enteric fever, 4; scarlet fever, 1; whooping cough, 1, and 15 from phthisis pulmonalis.

PENNSYLVANIA—*Philadelphia*.—Year ended December 31, 1898. Census population, 1,046,964. Total number of deaths, 23,790, including diphtheria, 998; enteric fever, 639 (including 73 soldiers); measles, 234; scarlet fever, 114; whooping cough, 162, and 2,590 from phthisis pulmonalis.

TENNESSEE—*Nashville*.—Month of December, 1898. Estimated population, 87,754; white, 54,595; colored, 33,159. Total number of deaths, 135; 62 white; 73 colored, including diphtheria, 1, and 16 from phthisis pulmonalis.

VIRGINIA—*Lynchburg*.—Month of December, 1898. Estimated population, 30,000. Total number of deaths, 29, including diphtheria, 1, and 3 from phthisis pulmonalis.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.	Week ended.	Population, U. S. Census of 1890.	Total deaths from all causes.	Deaths from—															
				Phthisis pulmonalis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.					
Allegheny, Pa	Dec. 24	106,287	33	3															
Do	Dec. 31	106,287	55	2															
Do	Jan. 7	106,287	83																
Ann Arbor, Mich	Dec. 31	9,431	4																
Ashtabula, Ohio	do	8,338	5																
Do	Jan. 8	8,338	1																
Aurora, Ill	Dec. 31	19,688	6																
Boston, Mass	Jan. 7	448,477	254	26							4								1
Bristol, R. I.	Dec. 24	5,478	2																
Do	Dec. 31	5,478	0																
Brockton, Mass	do	27,294	8	1															
Butler, Pa	Dec. 2	8,734	2																
Do	Dec. 16	8,734	6																
Cambridge, Mass	Jan. 7	70,028	25	4															1
Charleston, S. C.	Dec. 31	a 54,965	b 33	2															1
Chicago, Ill	Jan. 7	1,099,850	c 499	49							8	3	18	1					1
Cincinnati, Ohio	Dec. 30	296,908	116	18							1		1						
Do	Jan. 6	296,908	11										2						
Concord, N. H.	Dec. 31	17,044	8								1								
Do	Jan. 7	17,044	12	1															
Dayton, Ohio	Jan. 6	61,220	31	4							1	1	1						
Detroit, Mich	Dec. 31	205,876	94	4														6	
Dubois, Pa	do	6,149	0																
Do	Jan. 7	6,149	2																
Dunkirk, N. Y	Dec. 31	9,416	2																
Elmira, N. Y	do	29,708	10																
Evansville, Ind	Jan. 7	50,756	16																
Everett, Mass	Dec. 31	11,068	2	1									1						
Fitchburg, Mass	do	22,037	2																
Flint, Mich	do	9,803	2																
Do	Jan. 7	9,803	2																
Grand Rapids, Mich	Dec. 24	60,278	20																
Do	Dec. 31	60,278	18																
Do	Jan. 7	60,278	21										1						
Green Bay, Wis	Dec. 31	9,069	5																
Haverhill, Mass	Jan. 7	27,412	12								1								
Hoboken, N. J.	Dec. 31	43,648	38	4															1
Holyoke, Mass	Jan. 7	35,637	20	2															
Honolulu, Hawaii	Dec. 10	d 30,000	21																1
Do	Dec. 17	30,000	21																
Jacksonville, Fla	Dec. 31	17,201	18	5							1								
Do	Jan. 7	17,201	22	3															
Johnstown, Pa	Dec. 31	21,805	8	2															
Do	Jan. 7	21,805	9																
Jersey City, N. J.	Jan. 1	163,003	e 86	11										2	4				
Kalamazoo, Mich	Dec. 31	17,853	7																
Lancaster, Pa	do	32,011	12																
Lawrence, Mass	do	44,654	33	1															
Lowell, Mass	Jan. 7	77,696	42	5										2	2				
Lynchburg, Va	do	19,709	9	1															
McKeesport, Pa	Dec. 31	20,741	14	1							2								
Manchester, N. H.	do	44,126	15	1										3					
Medford, Mass	Jan. 7	11,079	3																1
Melrose, Mass	Dec. 31	8,519	5								1								
Middletown, N. Y	do	11,977	10	2															
Milwaukee, Wis	do	204,468	78	7							1								
Minneapolis, Minn	do	164,738	48	4							1		1	1	3				1
Nashville, Tenn	Jan. 7	76,168	32	8							1		1	1					1
New Bedford, Mass	do	40,733	30	4							1		1	1					
Newburyport, Mass	Dec. 31	13,947	5								1		1	2					
New Orleans, La	do	242,039	148	17															
Newport, R. I.	Jan. 7	19,457	12								2	1							
New York, N. Y.	Dec. 31	3,438,899	1,560	173									9	11	25	9			5
Do	Jan. 7	3,438,899	1,521	177									12	4	31	8			8
North Adams, Mass	Dec. 31	16,074	12																
Do	Jan. 7	16,074	5	1															
Oseonts, N. Y	do	6,272	4																
Petersburg, Va	Jan. 1	22,680	9	1															
Do	Jan. 8	22,680	11	2															
Philadelphia, Pa	Jan. 7	1,046,964	713	76									24	5	23				1
Pittsburg, Pa	Dec. 31	238,617	124	5									3	1	3				2

a Estimated population, 65,165—white, 28,870; colored, 36,295. b White, 5; colored, 28. c Influenza, 4. d Estimated. e Grippe, 5.

MORTALITY TABLE, CITIES OF THE UNITED STATES—Continued.

Cities.	Week ended.	Population, U. S. census of 1890.	Total deaths from all causes.	Deaths from—													
				Phthisis pulmonalis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.			
Pittsfield, Mass.....	Dec. 24.....	17,281	5	1													
Do.....	Dec. 31.....	17,281	7														
Do.....	Jan. 7.....	17,281	11	1													
Plainfield, N. J.....	do.....	11,267	4														
Portland, Me.....	Dec. 31.....	36,425	22														
Do.....	Jan. 7.....	36,425	21														
Providence, R. I.....	do.....	182,146	a 84	12													2
Fueblo, Colo.....	Dec. 24.....	24,558	13														
Do.....	Dec. 31.....	24,558	8														
Salt Lake City, Utah.....	do.....	44,843	15														
San Diego, Cal.....	Dec. 24.....	16,159	6	1													
Do.....	Dec. 31.....	16,159	4	1													
San Jose, Cal.....	Dec. 17.....	18,060	3														
Do.....	Dec. 25.....	18,060	4														
Do.....	Dec. 31.....	18,060	4	2													
Santa Barbara, Cal.....	do.....	5,864	2														
Savannah, Ga.....	do.....	43,189	42	3													
Scranton, Pa.....	do.....	75,215	49														
Do.....	Jan. 7.....	75,215	43														
Shreveport, La.....	do.....	11,979	3														
Spokane, Wash.....	Dec. 31.....	19,922	10	1													1
Steelton, Pa.....	do.....	9,250	5														
Tacoma, Wash.....	do.....	36,006	8														
Taunton, Mass.....	Jan. 3.....	25,448	9	2													
Tiffin, Ohio.....	Jan. 7.....	10,801	2														
Waltham, Mass.....	Dec. 31.....	18,707	4														
Warren, Ohio.....	do.....	5,973	2														
Do.....	Jan. 7.....	5,973	3														
Washington, D. C.....	Dec. 31.....	230,392	161	19													
Westfield, Mass.....	do.....	9,805	3	1													
Do.....	Jan. 7.....	9,805	4														
Wheeling, W. Va.....	Dec. 31.....	35,013	20	2													
Wichita, Kans.....	Jan. 7.....	23,953	6														
Wilmington, Del.....	do.....	61,431	35	6													
Winona, Minn.....	Dec. 24.....	18,208	11	1													
Do.....	Dec. 31.....	18,208	3														
Woburn, Mass.....	Dec. 17.....	13,499	5	1													
Do.....	Dec. 24.....	13,499	3														
Do.....	Dec. 31.....	13,499	4														
Yonkers, N. Y.....	Jan. 6.....	32,033	19	2													1
Youngstown, Ohio.....	Jan. 7.....	33,220	4														

a Influenza, 11.

Table of temperature and rainfall, week ended January 2, 1899.

[Received from Department of Agriculture, Weather Bureau.]

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Atlantic Coast:						
Eastport, Me.....	24		6	.84	.05	
Portland, Me.....	26		7	.77	.24	
Northfield, Vt.....	18		6	.72		.60
Boston, Mass.....	29		5	.79		.06
Vineyard Haven, Mass.....	33	0		.70		.35
Nantucket, Mass.....	33		2	.92		.34
Woods Hole, Mass.....	33		4	.79		.49
Block Island, R. I.....	34		5	.90		.27
New Haven, Conn.....	30		4	.85		.37
Albany, N. Y.....	26		5	.58	.09	
New York, N. Y.....	32		2	.79		.02
Harrisburg, Pa.....	30	0		.72		.08
Philadelphia, Pa.....	33		1	.69	.21	
New Brunswick, N. J.....	33		4	.87	.26	
Atlantic City, N. J.....	34		2	.91		.63
Baltimore, Md.....	35	2		.75		.08
Washington, D. C.....	34	1		.72	.32	
Lynchburg, Va.....	37	1		.79	.42	
Cape Henry, Va.....	49	2		.91		.65
Norfolk, Va.....	41	0		.84		.65
Charlotte, N. C.....	40	3		1.07		.55
Raleigh, N. C.....	40	4		1.00		.60
Kittyhawk, N. C.....	42			1.00		
Hatteras, N. C.....	46	0		1.28		.54
Wilmington, N. C.....	46	3		.79		.77
Columbia, S. C.....	47	1		.79		.57
Charleston, S. C.....	49	3		.82		.81
Augusta, Ga.....	46	3		.79		.61
Savannah, Ga.....	50	3		.75		.72
Jacksonville, Fla.....	54	1		.70		.63
Jupiter, Fla.....	65		1	.72		.62
Key West, Fla.....	69	0		.39		.39
Gulf States:						
Atlanta, Ga.....	42	1		1.12		.37
Tampa, Fla.....	61		3	.56		.56
Pensacola, Fla.....	50	1		.93		.54
Mobile, Ala.....	50		1	1.07		.89
Montgomery, Ala.....	46	3		1.14		.67
Vicksburg, Miss.....	47		2	1.14		.29
New Orleans, La.....	53		1	1.04		.99
Shreveport, La.....	45	1		1.05		1.05
Fort Smith, Ark.....	37	5		.66		.65
Little Rock, Ark.....	40	1		.98		.98
Palestine, Tex.....	44	1		.90		.90
Galveston, Tex.....	53		2	.87		.67
San Antonio, Tex.....	49		2	.42		.42
Corpus Christi, Tex.....	55		5	.39		.39
Ohio Valley and Tennessee:						
Memphis, Tenn.....	40	0		1.12		1.02
Nashville, Tenn.....	39		1	.93		.53
Chattanooga, Tenn.....	40	0		1.18		.92
Knoxville, Tenn.....	37	0		1.05		.36
Louisville, Ky.....	35		1	.84		.26
Indianapolis, Ind.....	30		1	.70		.60
Cincinnati, Ohio.....	33		2	.77		.30
Columbus, Ohio.....	29		1	.70		.37
Parkersburg, W. Va.....	33		4	.70	.02	
Pittsburg, Pa.....	32		3	.70	.40	
Lake Region:						
Oswego, N. Y.....	27		6	.73		.22
Rochester, N. Y.....	26		4	.70	.03	
Buffalo, N. Y.....	27		4	.71		.11
Erie, Pa.....	29		5	.70		.46
Cleveland, Ohio.....	28	2		.56		.40
Sandusky, Ohio.....	29		1	.51		.38
Toledo, Ohio.....	28		2	.49		.41
Detroit, Mich.....	27		2	.54		.45
Lansing, Mich.....	25		3	.42		.31
Port Huron, Mich.....	25		3	.49	.52	
Alpena, Mich.....	22		5	.56		.52
Sault Ste. Marie, Mich.....	17		6	.42		.12
Marquette, Mich.....	19		7	.49	.15	
Green Bay, Wis.....	18		3	.56		.40
Grand Haven, Mich.....	27		1	.60		.40

a The figures in these columns represent the average daily departure.

Table of temperature and rainfall, week ended January 2, 1899—Continued.

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	α Excess.	α Defic'y.	Normal.	Excess.	Deficiency.
Lake Region—Continued.						
Milwaukee, Wis.....	22		7	.49		.46
Chicago, Ill.....	26		5	.49		.88
Duluth, Minn.....	12		11	.28		.21
Upper Mississippi Valley:						
St. Paul, Minn.....	18		6	.28		.28
La Crosse, Wis.....	18		7	.30		.29
Dubuque, Iowa.....	20		4	.37		.37
Davenport, Iowa.....	23		2	.37		.37
Des Moines, Iowa.....	20		2	.30		.26
Keokuk, Iowa.....	26	0		.42		.41
Hannibal, Mo.....	29		2	.30		.24
Springfield, Ill.....	28		3	.55		.55
Cairo, Ill.....	35	1		.77		.67
St. Louis, Mo.....	31	1		.52		.50
Missouri Valley:						
Columbia, Mo.....	35		5	.42		.42
Springfield, Mo.....	32	0		.61		.61
Kansas City, Mo.....	26	4		.28		.28
Topeka, Kans.....	31		4	.21		.21
Wichita, Kans.....	33		1	.21		.21
Concordia, Kans.....	27	0		.14		.14
Lincoln, Nebr.....	24		2	.19		.18
Omaha, Nebr.....	20	1		.21		.15
Sioux City, Iowa.....	21		3	.21		.19
Yankton, S. Dak.....	14	6		.12		.11
Valentine, Nebr.....	18	4		.12	.09	
Huron, S. Dak.....	9	5		.12		.12
Pierre, S. Dak.....	17		1	.14		.07
Moorhead, Minn.....	4		2	.14	.00	
Bismarck, N. Dak.....	5	4		.14	.24	
Williston, N. Dak.....	5	1		.14	.06	
Rocky Mountain Region:						
Havre, Mont.....	9	3		.14	.20	
Helena, Mont.....	16	0		.28		.02
Miles City, Mont.....	15	3		.07	.07	
Rapid City, S. Dak.....	24		3	.07		.01
Spokane, Wash.....	26			.63		
Wallawalla, Wash.....	32	6		.56		.21
Baker City, Oreg.....	25	0		.37	.17	
Winnemucca, Nev.....	27	8		.28	.45	
Idaho Falls, Idaho.....	20	1		.39	.26	
Salt Lake City, Utah.....	28		2	.35	.27	
Lander, Wyo.....	19		3	.14	.40	
Cheyenne, Wyo.....	24	0		.07	.00	
North Platte, Nebr.....	18	7		.14		.13
Denver, Colo.....	26		2	.14	.26	
Pueblo, Colo.....	28		6	.14	.31	
Dodge City, Kans.....	26	4		.14		.12
Oklahoma, Okla.....	33	3		.50		.50
Amarillo, Tex.....	34		4	.09		.07
Abilene, Tex.....	42	1		.28		.28
Santa Fe, N. Mex.....	27		2	.14		.14
El Paso, Tex.....	42		1	.09		.09
Phoenix, Ariz.....	51		2	.20		.20
Pacific Coast:						
Seattle, Wash.....	40		2	1.24	1.40	
Tacoma, Wash.....	40		1	1.56	.52	
Fort Canby, Wash.....	41		2	2.18	2.37	
Portland, Oreg.....	38			1.73		
Roseburg, Oreg.....	40	0		1.54	.50	
Eureka, Cal.....	47			1.98		
Redbluff, Cal.....	44		3	1.20		1.20
Carson City, Nev.....	31	3		.53	.33	
Sacramento, Cal.....	45		2	.96	.14	
San Francisco, Cal.....	50		3	1.18		.54
Fresno, Cal.....	45	0		.35	.21	
San Luis Obispo, Cal.....	52		1	1.05	.93	
Los Angeles, Cal.....	54	2		.85		.85
San Diego, Cal.....	54	2		.42		.42
Yuma, Ariz.....	55			.14		

α The figures in these columns represent the average daily departure.

FOREIGN.

[Reports received from United States consuls through the Department of State and from other sources.]

Cholera, yellow fever, plague, and smallpox as reported to the Supervising Surgeon-General United States Marine-Hospital Service, December 31, 1898, to January 13, 1899.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
India: Madras.....	Nov. 19-Dec. 2...	.....	7	

YELLOW FEVER.

Brazil: Rio de Janeiro	Nov. 11-Dec. 2...	14	9	
Colombia: Barranquilla	Dec. 2-Dec. 9...	1	1	
Cuba: Habana.....	Dec. 16-Dec. 22.....	.....	1	
Mexico: Vera Cruz.....	Dec. 8-Dec. 29.....	.....	16	

PLAGUE.

India: Bombay	Nov. 22-Nov. 29.....	.....	43	
Madras.....	Nov. 19-Nov. 25.....	.....	1	

SMALLPOX.

Belgium: Antwerp.....	Dec. 3-Dec. 10...	15	1	
Brazil: Bahia.....	Nov. 19-Nov. 26.....	46	3	
Rio de Janeiro.....	Nov. 11-Dec. 2...	46	20	
England: Liverpool.....	Dec. 3-Dec. 10...	1	1	
London.....	Dec. 17-Dec. 24.....	.....	1	
India: Bombay.....	Nov. 22-Nov. 29.....	.....	1	
Madras.....	Nov. 26-Dec. 2.....	.....	1	
Japan: Awomori Ken.....	Nov. 18-Dec. 8...	53	13	
Hiogo Ken.....	Nov. 18-Dec. 8...	1	.....
Kanagawa Ken.....	Nov. 18-Dec. 8...	1	.....
Nagasaki Ken.....	Nov. 18-Dec. 8...	1	.....
The Hokkaido.....	Nov. 18-Dec. 8...	8	.....
Tottori Ken.....	Nov. 18-Dec. 8...	3	.....
Mexico: Monterey.....	Dec. 2-Dec. 8...	.....	1	
Russia: Moscow.....	Nov. 26-Dec. 10...	30	14	
Odessa.....	Dec. 3-Dec. 17...	6	1	
St. Petersburg.....	Dec. 3-Dec. 10...	3	.....
Warsaw.....	Nov. 26-Dec. 17...	15	.....
Turkey: Constantinople.....	Dec. 12-Dec. 19...	.....	14	
Smyrna.....	Dec. 4-Dec. 11...	.....	2	

Current quarantine measures.

[Translated in this Bureau from the "Veröffentlichungen des Kaiserlichen Gesundheitsamtes," Berlin, December 21, 1898.

RUSSIA.—In order to prevent the spread of plague in Anzob, dwelling houses and other buildings occupied by residents of Anzob and four adjoining villages are ordered to be disinfected. Clothing and body and bed linen of persons occupying these houses shall be burned and fresh articles shall be supplied.

TURKEY.—The quarantine measures ordered at Beirut, in October of this year, against arrivals from the Caspian Sea, is again raised, according to advices of December 1, 1898.

BRITISH INDIA.—With the consent of the secretary of state for India, the Government, under date of November 11, 1898, ordered a commission for the investigation of plague. The president of the commission is Prof. T. R. Fraser. Other members are Chief of the Indian Department of the Interior Hewett, Prof. Wright, of the army medical school at Netley, Civil Officer of the Presidency of Bombay Cumine, Dr. Ruffer of the Egyptian health department and Indian civil service officer, Halifax, secretary.

The investigations of the commission, which is to be of a scientific character, shall be directed to the cause of plague in the several scenes of its appearance in India, the means and manner of its transmission, the curative operation of the antitoxic serum, and the value of preventive inoculation. On the arrival from England of the several members, the commission will meet at Bombay and probably also at the other places where plague has appeared. The proceedings will be regulated by the president in concert with the members. It is hoped that the commission will receive the fullest support of the officials.

MADAGASCAR.—The infected straw huts and others in their vicinity have been burned. Rats and mice will be as nearly as possible exterminated. Infected or suspicious dwellings shall be disinfected, also susceptible articles, such as clothing. Tamatave is quarantined against throughout the island. All persons coming from suspect places are detained in observation camps and their effects disinfected.

SMALLPOX.

DANISH ANTILLES.—According to official advices of December 12, quarantine against arrivals from Puerto Cabello, Valencia, La Guayra, and Caracas is suspended and replaced by a visit of observation.

AFRICA.

Health of the regency of Tunis.

TUNIS, December 17, 1898.

SIR: In conformity with the contents of the Department's circular of October 31 last, I beg to transmit you to-day a report of the general state of health in the principal towns of the regency of Tunis up to date: Tunis, Susa, Monestir, Kerouan, Mahdia, Sfax, El Kaf, Gabes, Djerba (Houmt-Souk), Biserta, Calla, Souk el Arba, Cabaria, and Baja.

I am happy to report no epidemic nor even any serious illness is existing in any of these places, and that the general health is very good everywhere. Of course there are light cases of sporadic fevers here

and there, as it is always the custom with the Arabs, who are very regardless about their health, but there are no signs anywhere of any alarming illness in the regency.

I am, sir, your very obedient servant,

ALFRED CHAPELIE,
United States Vice-Consul at Tunis.

HON. SECOND ASSISTANT SECRETARY OF STATE.

BRAZIL.

Sanitary reports from Rio de Janeiro and from the state of Sao Paulo.

RIO DE JANEIRO, *December 7, 1898.*

SIR: I have the honor to transmit to you the official report for the week ended November 25. There were 261 deaths from all causes, the same as compared with the foregoing week; 8 deaths from *accesso pernicioso*, the same as before; also 2 deaths from yellow fever, the same as before; 3 deaths from smallpox, a decrease of 5; 1 death from typhoid fever, a decrease of one; 2 deaths from measles, the same as before; no death from whooping cough, a decrease of 1; 1 death from beriberi, an increase of 1, and 48 deaths from tuberculosis, a decrease of 12. * * *

Information.—Yellow fever appears to be stationary, but in small number, and smallpox declines slowly.

From the state of Sao Paulo I can give you some official data concerning the sanitary conditions during the month of September. The total number of deaths were 3,751, a decrease of 1,851, as compared with the month of July. From tuberculosis there died 141 persons, a decrease of 4, and from malarial fever, 134 persons (46 at Sertao Zinho and 19 at Tbitinga), an increase of 52.

From typhoid fever there died 41 persons, an increase of 15; from yellow fever there occurred 4 deaths, a decrease of 15.

From smallpox there died 43 persons at the city of Sao Paulo, a decrease of 26.

In regard to other infectious diseases, there were in the state of Sao Paulo 32 deaths from measles, 3 deaths from diphtheria, 43 deaths from whooping cough, 6 deaths from erysipelas, 10 deaths from dysentery, 15 deaths from influenza, 10 deaths from leprosy, and 1 death from scurvy.

Since last report the following-named ships have been inspected and received bills of health of this office: December 1, bark *Pedro*, Italian, for Pensacola; bark *Mirzapore*, Norwegian, for Savannah, Ga. December 3, steamship *Galileo*, Belgian, for New York. December 7, steamship *Taurus*, Norwegian, for Philadelphia; bark *Quiteria*, Portuguese, for Philadelphia.

Respectfully, yours,

W. HAVELBURG, M. D.
Sanitary Inspector, U. S. M. H. S.

The SUPERVISING SURGEON-GENERAL,
U. S. Marine-Hospital Service.

RIO DE JANEIRO, *December 14, 1898.*

SIR: I have the honor to transmit to you the official report for the week ended December 2. There were 258 deaths from all causes, a decrease of 3; 12 deaths from *accesso pernicioso*, an increase of 4; 2 deaths from yellow fever, the same as before; 6 deaths from smallpox,

an increase of 3; 4 deaths from typhoid fever, an increase of 3; 1 death from measles, a decrease of 1; 3 deaths from beriberi, an increase of 2, and 45 deaths from tuberculosis, a decrease of 3.

* * * * *

Since last report the following-named ships have been inspected and received bills of health of this office: December 9, steamship *Sirius*, British, for New York; steamship *Asiatic Prince*, British, for New York. December 10, steamship *Capri*, German, for New York. December, 12, bark *James H. Elwell*, American, for Philadelphia; barkentine *Josephine*, American, for Baltimore.

Respectfully, yours,

W. HAVELBURG, M. D.,
Sanitary Inspector, U. S. M. H. S.

The SUPERVISING SURGEON-GENERAL,
U. S. Marine-Hospital Service.

CUBA.

Sanitary report from Habana.

HABANA, CUBA, *January 7, 1899.*

SIR: I have the honor to submit the following report for the week ended Thursday, January 5, 1899:

The death rate continues to decrease; this is due to almost complete disappearance of the Spanish army and some efforts to make the city mechanically clean. The only death from yellow fever during the week occurred in the ranks of the sick Spanish soldiers.

The death designated as occurring from borras fever as a matter of course occurred in the person of a Cuban. The deaths from all preventable diseases show an encouraging decrease. There is evidently an increasing number of cases of gripe; cases are reported on some of the navy vessels now lying in the harbor.

It would be well to state here in view of the fact that bills of health are issued to vessels of the navy on the statements of their medical officers and without inspections of the ships or crews that the utmost care is being taken by the medical officers of the navy to prevent the infection of their respective vessels and crews. The vessels are moored at buoys in that part of the harbor which is well removed from the city. The crews are not allowed ashore and the officers are requested to be aboard ship before sunset each day.

My attention has been called to army employees returning to the United States from the camps of the Seventh Army Corps. Some of the transports on which men return do not require the said men to obtain certificates of health and vaccination. All transports carrying medical officers of the United States Marine-Hospital Service require that such certificates be obtained before the men are allowed on board. I find in examining the men that over 25 per cent have never been vaccinated.

With smallpox in the camps from which these people come it is not unlikely that unless every precaution is taken the disease will be taken to the United States on some of these vessels. That part of the army which is preserving order in the city have their tents pitched in the Prado and in other parts of the city. One encampment is situated in the small plaza in front of the governor-general's palace, which is within 100 yards of Caballeria Wharf, while another camp is near the

water front just east of the Prado. These two camps are in dangerous localities.

Very respectfully,

W. F. BRUNNER,
Sanitary Inspector, U. S. M. H. S.

The SUPERVISING SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Mortality of the city of Habana for the week ended Thursday, January 5, 1899.

Cause of death.	Total.
Yellow fever.....	1
Borras fever.....	1
Enteric fever.....	17
Pernicious fever.....	9
Malarial fever.....	50
Grippe.....	2
Dysentery.....	14
Enteritis.....	68
Hydrophobia.....	1
Starvation.....	1
Pneumonia.....	5
Tuberculosis.....	40
Deaths from all causes.....	341
Annual ratio per 1,000.....	83.66

DANISH WEST INDIES.

Quarantine against Venezuela replaced by sanitary inspection.

LEGATION OF THE UNITED STATES,
Copenhagen, December 15, 1898.

SIR: I have the honor to report that on the 11th ultimo the government of the Danish West Indies replaced the quarantine declared against ships arriving from Puerto Cabello, Valencia, La Guayra, and Caracas, Venezuela, by sanitary inspection.

I have the honor to be, etc.,

LAURITZ S. SWENSON.

Hon. SECRETARY OF STATE, *Washington, D. C.*

ITALY.

Quarantine against plague—Order No. 3—Maritime sanitation.

[Translated in this Bureau from copy of order officially forwarded.]

The existence of bubonic plague having been officially reported in the presidency of Madras and the island of Madagascar, in view of the law of December 22, 1888, and maritime sanitary orders of May 8, 1897, and July 15, 1897, it is decreed—

The ports of the presidency of Madras and the island of Madagascar are declared infected with bubonic plague and the regulations laid down in the orders cited above are therefore in force against said ports and island. Prefects of maritime provinces, sanitary police authorities, and port officials of the kingdom are charged with carrying this order into effect.

MARRENGO,
Minister of the Interior.

TURKEY.

Sanitary report from Constantinople.

[Report No. 205.]

CONSTANTINOPLE, *December 14, 1898.*

The plague epidemic is abating in Bombay and has also disappeared from Russia. I am glad to be able to state that, because one or two weeks ago it was stated that plague cases occurred in the Caucasus as well as in Poland. Said cases never existed. At Anzob, in the district of Samarcand, the epidemic has already disappeared, and public health in Asiatic Russia is perfect. This official sanitary news was communicated at the last sitting of the international sanitary commission, held the 13th instant, by Mr. Karakauowsky, M. D., the Russian sanitary commissioner. He communicated that the epidemic at Anzob was imported through Belluchistan and Afghanistan, where it is feared that cases still exist. The Russian Government, in order to prevent the importation of said epidemic from India, had given stringent orders to forbid the Moslem pilgrims to go to the Hedjaz through India. The latter, in spite of said orders, went on their pilgrimage to the holy cities of Islam, but through Afghanistan and Belluchistan, which have been contaminated by said pilgrims coming back home from Djiddah. From Teheran we have received the following sanitary news: Public health in Persia is perfect, excepting at Meshed, where many persons, among whom very many children, suffer from enlargement of the lymphatic glands.

I can not understand how public health may be perfect in a country where many persons suffer from buboes, especially at a time when plague is raging in the neighboring places. It must not be forgotten that Meshed is a city where there is a continuous gathering of Moslem pilgrims, especially from India, Afghanistan, Belluchistan, and Persia. It has been alleged that said buboes have to be attributed to venereal diseases in little children too.

Plague in Madagascar.—The outbreak of plague at Madagascar was officially announced at the above mentioned sitting of the international sanitary commission. It is very much to be feared that said disease will spread by sanitary smuggling, as it was imported to Madagascar from India. I must remember that in 1892 cholera was imported to Yemen by a slave ship smuggling negroes, landed at Maidé, and thence to Lokeia. The disease spread rapidly in all the Yemen, wherefrom it was imported to Asia Minor by the soldiers coming back home. (See my report of November 4, 1892.)

Sanitary smuggling as a means of spreading plague.—By sanitary smuggling plague was imported last year, or rather two years ago, to Djiddah. I have already mentioned in my previous reports the decision taken by the international sanitary commission then to communicate to the Ottoman Government the necessity of having at the entrance of the Red Sea, at Bab-el-Mandeb, a dispatch boat in order to survey the little sailing boats (samboos or hutras) which swarm in the Indian Ocean and which sail without any ship's papers. They sail generally on smuggling purposes. Said decision could not be put into execution at that time because the Turkish Government considered said service as a sanitary one, and claimed, as a consequence, to have the coal of said dispatch boat paid for by the sanitary board. At the last sitting it was decided to reconsider the matter and present again to the Imperial

Government the facts as well as the great danger to which the country is exposed by said sanitary smuggling.

Diseases in the city—Typhoid fever.—In Constantinople we have to deal with the same epidemics, *i. e.*, influenza, smallpox, diphtheria, and typhoid fever. I can not omit to report the sad fact of the outbreak of a little epidemic of typhoid fever which raged in one of the French schools of this town. The pupils of the school of N. D. de Sion have been obliged, nobody knows why, to drink the water of the wells of said school. It is well-known that well waters, especially in towns like in Constantinople, are unhealthy. In Constantinople, besides being unhealthy, said water is brackish and repulsive. Nine young ladies fell ill from the 25th of last October to the 6th of November. From these 9 cases 3 have already proved fatal, and the other 6 are not yet out of danger.

The number of deaths registered in Constantinople from November 28 to December 5, is 408, of which 2 are from measles, 7 from diphtheria, 7 from typhoid fever, and 26 from smallpox.

SPIRIDION C. ZAVITZIANO,
United States Sanitary Commissioner.

WEST INDIES.

Current quarantine measures.

BARBADOS, *December 24, 1898.*

SIR: My last circular was dated October 29, since when I have to report as follows:

Barbados.—The quarantine here against Santos, La Guayra, and Caracas was removed on the 19th instant, but all vessels from La Guayra are inspected by the health officer before being admitted to pratique in order to ascertain that there is no one on board from other infected places in Venezuela.

Quarantine is in force here against Bahia, Cuba, Para, Rio Janeiro, and Venezuela (except Barancas, Cuidad Bolivar, Caracas, and La Guayra). Vessels from these four places and Puerto Rico are subjected to medical inspection.

Trinidad.—The quarantine there against the whole of Venezuela was removed on the 22d instant.

St. Thomas.—The quarantine there against Caracas, La Guayra, Puerto Cabello, and Valencia was removed on November 11, but all vessels from those places are subject to medical inspection.

Quarantine is in force there against Bahia, Cuba, Marguerita, Para, Rio Janeiro, Vera Cruz, and Tampico.

Para.—The British consul reports 5 deaths in September from yellow fever, 6 in October, and 23 in November.

The British and American consular bills of health issued on 4th instant to the steamship *Grangense*, respectively, stated that there had been 9 and 12 deaths from yellow fever in the preceding week and fortnight, respectively.

St. Vincent.—Free pratique is granted to arrivals from all ports in Venezuela to the South of Cape Paria with satisfactory certificates from accredited agents.

St. Lucia.—Quarantine is in force there against Bahia, Cuba, Curacao, La Guayra, Para, Puerto Cabello, Rio Janeiro, Santos, and Valencia.

The reports kindly forwarded by the chairman of the quarantine

board on November 11 and 25 and December 9 and 23, give the following particulars :

Bahia.—For the fortnight ended October 24, 41 cases, 3 deaths from smallpox. For the fortnight ended November 12, 42 cases, 2 deaths from smallpox ; 1 case, 1 death from yellow fever. For the fortnight ended November 26, 83 cases, 15 deaths from smallpox. For the fortnight ended December 7, 21 cases, 3 deaths from smallpox.

Rio de Janeiro.—For the fortnight ended October 29, 29 cases, 9 deaths from smallpox ; 9 cases, 7 deaths from yellow fever. For the fortnight ended November 12, 9 cases, 9 deaths from yellow fever. For the fortnight ended November 22, — cases, 5 deaths from yellow fever ; 22 cases, 6 deaths from smallpox. For the fortnight ended December 11, 18 cases, 7 deaths from smallpox ; 8 cases, 5 deaths from yellow fever.

Santos.—From fortnight previous to October 22 to November 21, clean bills of health.

Victoria.—From fortnight previous to October 22 to November 21, clean bills of health.

Pernambuco.—From fortnight previous to October 22 to December 9, clean bills of health.

Montevideo.—From fortnight previous to October 22 to November 5, clean bills of health.

Buenos Ayres.—From fortnight previous to October 22 to November 5, clean bills of health.

I have the honor to be, sir, your obedient servant,

JAS. SANDERSON,
Clerk, Quarantine Board.

The SUPERVISING SURGEON-GENERAL,
U. S. Marine-Hospital Service.

FOREIGN STATISTICAL REPORTS.

AFRICA—*Lorenzo Marques—Delagoa Bay*.—Month of May, 1898. Estimated population, 5,000. Total number of deaths, 65, including 5 from smallpox and 5 from phthisis pulmonalis.

Month of June, 1898. Total number of deaths, 51, including measles, 1 ; smallpox, 4, and 2 from phthisis pulmonalis.

Month of July 1898. Total number of deaths, 53, including smallpox, 14, and 2 from phthisis pulmonalis.

BAHAMAS—*Governors Harbor*.—Two weeks ended December 27, 1898. Estimated population, 1,500. One death. No contagious diseases.

Green Turtle Cay—Abaco.—Two weeks ended December 25, 1898. Estimated population, 3,900. No deaths and no contagious diseases.

Nassau.—Two weeks ended December 24. Estimated population, 11,000. No deaths and no contagious diseases reported.

BRITISH COLUMBIA—*Victoria*.—Month of December, 1898. Estimated population, 20,000. Total number of deaths, 15, including 1 from measles.

CANADA—*Hamilton*.—Month of December, 1898. Estimated population, 54,000. Total number of deaths not reported. One death from diphtheria, 1 from enteric fever, and 4 deaths from phthisis pulmonalis.

CHILE—*Antofagasta*.—Month of November, 1898. Estimated population, 14,000. Total number of deaths, 41, including 2 from phthisis pulmonalis.

COLOMBIA—*Cartagena*.—Month of October, 1898. Estimated population, 9,000. Total number of deaths, 39, including 2 from phthisis pulmonalis.

FRANCE—*Nice*.—Month of November, 1898. Estimated population, 108,227. Total number of deaths, 215, including enteric fever, 34, and 24 from phthisis pulmonalis.

St. Etienne.—From November 15 to 30, 1898, total number of deaths, 95, including diphtheria, 1, and 10 from phthisis pulmonalis.

Two weeks ended December 15, 1898. Total number of deaths, 103, including enteric fever, 2, and 5 from phthisis pulmonalis.

GERMANY—*Glauchau*.—Month of September, 1898. Estimated population, 27,000. Total number of deaths, 67, including 3 from tuberculosis.

Month of October, 1898. Total number of deaths, 49, including 2 from tuberculosis.

Month of November, 1898. Total number of deaths, 40, including diphtheria, 3, and 3 from phthisis pulmonalis.

GREAT BRITAIN—*England and Wales*.—The deaths registered in 33 great towns in England and Wales during the week ended December 24, correspond to an annual rate of 17.8 a thousand of the aggregate population, which is estimated at 11,218,378. The highest rate was recorded in Swansea, viz, 30.2, and the lowest in Cardiff, viz, 10.6.

London.—One thousand four hundred and seventy deaths were registered during the week, including measles, 24; scarlet fever, 14; diphtheria, 46; whooping cough, 21; enteric fever, 21, and diarrhea and dysentery 19. The deaths from all causes correspond to an annual rate of 17.0 a thousand. In greater London 1,926 deaths were registered, corresponding to an annual rate of 15.7 a thousand of the population. In the "outer ring" the deaths included 22 from diphtheria, 3 from measles, 2 from scarlet fever, 4 from whooping cough, and 1 from smallpox.

Ireland.—The average annual death rate represented by the deaths registered during the week ended December 24 in the 23 principal town districts of Ireland was 21.5 a thousand of the population, which is estimated at 1,007,798. The lowest rate was recorded in Kilkenny, viz, 0.0, and the highest in Armagh, viz, 42.8 a thousand. In Dublin and suburbs 169 deaths were registered, including enteric fever, 1; scarlet fever, 2, and whooping cough, 4.

Scotland.—The deaths registered in 8 principal towns during the week ended December 24 correspond to an annual rate of 18.2 a thousand of the population, which is estimated at 1,568,536. The lowest mortality was recorded in Leith, viz, 11.6, and the highest in Perth, viz, 22.1 a thousand. The aggregate number of deaths registered from

all causes was 549, including diphtheria, 4 ; measles, 12 ; scarlet fever, 14, and whooping cough, 14.

GUIANA—*Parimaribo*.—Month of November, 1898. Estimated population, 30,535. Total number of deaths, 83. No contagious diseases reported.

HONDURAS—*Belize*.—Month of November, 1898. Estimated population, 13,000. Total number of deaths, 46, including whooping cough, 1, and 3 from phthisis pulmonalis.

JAMAICA.—Four weeks ended December 17, 1898. Estimated population, 694,866. Number of deaths and contagious diseases not reported.

Kingston.—Month of November, 1898. Estimated population, 34,314. Total number of deaths, 99, including diphtheria, 1 ; enteric fever, 7, and 10 from phthisis pulmonalis.

JAPAN—*Nagasaki*.—Ten days ended November 30. Estimated population, 70,000. Total number of deaths not reported. Two deaths from diphtheria and 1 from enteric fever.

Ten days ended December 10, 1898. Total number of deaths not reported. One death from diphtheria and 1 from enteric fever.

MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—									
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.	
Acapulco	Dec. 24.....	6,500	3										
Aix la Chapelle.....	Dec. 17.....	130,000	49										
Do	Dec. 24.....	130,000	41										
Amherstburg.....	do.....	2,300	1										
Do	Dec. 31.....	2,300	0										
Do	Jan. 7.....	2,300	1										
Amsterdam.....	Dec. 17.....	512,043	152							1	7	6	
Antwerp.....	Dec. 16.....	282,872	93			1			8	1	1	1	1
Barmen.....	Dec. 10.....	133,040	60						1		3		
Do	Dec. 17.....	133,000	53							2			1
Barranquilla	do.....	40,000	25										
Belfast.....	do.....	304,610	136					4		3	2		4
Belize	Dec. 29.....	13,000	10										
Berlin	Dec. 3.....	1,728,201	543					2	10	28	5		
Do	Dec. 10.....	1,728,201	548					1	7	20	7		
Birmingham.....	Dec. 17.....	510,343	153					2	2	3	3		3
Bluefields	Dec. 24.....	3,018	6										
Bradford	Dec. 17.....	231,260	0					1					
Bremen	Dec. 10.....	144,000	47								1		
Do	Dec. 17.....	144,000	38						1				
Bristol	do.....	316,900	93							1	1		2
Brussels	Dec. 10.....	531,024	181					1			5		1
Do	Dec. 17.....	531,024	201					3	1	1	7		
Callao.....	Dec. 11.....	25,000	23										4
Cardiff.....	Dec. 10.....	177,770	50							2			4
Do	Dec. 17.....	177,770	56								1		1
Catania.....	Dec. 15.....	120,000	87										
Do	Dec. 22.....	120,000	85					5					1
Chaudiere Junction.....	Dec. 31.....	500	a 1										1
Chemnitz.....	Dec. 10.....	172,840	84							3			
Do	Dec. 17.....	172,840	77							1	1		
Christiania	do.....	207,000	77						1		1		
Coburg	Dec. 3.....	19,400	10										
Do	Dec. 10.....	19,400	6										
Cognac	do.....	20,400	7										
Do	Dec. 17.....	20,400	5										
Cologne	Dec. 12.....	351,555	116							2	1		1
Do	Dec. 17.....	351,555	112					2		1	1		3
Colombo.....	Nov. 26.....	130,000	88					2					
Do	Dec. 3.....	130,000	96					1					
Colon	Dec. 28.....	8,000	0										
Constantinople	Dec. 19.....	700,000	b 248			14		4		3	5		
Copenhagen.....	Dec. 10.....	351,000	123					1		1	3		2
Do	Dec. 17.....	351,000	110					1	3	1	2		
Dresden	do.....	388,300	109					1		2	1		1
Dublin.....	do.....	349,594	169					6	1	3			5
Dundee.....	do.....	164,575	67										3
Do	Dec. 24.....	164,575	65						2	1			3
Edinburgh	Dec. 17.....	295,628	116						2	1	1		1
Frankfort-on-the Main.....	do.....	246,000	65										
Gibraltar	Dec. 11.....	25,900	10										
Do	Dec. 18.....	25,900	10										
Girgenti.....	Dec. 10.....	24,428	13										
Do	Dec. 17.....	24,428	12										
Glasgow.....	do.....	724,349	266					6	5	2	5		9
Gothenburg	Dec. 10.....	120,552	36						2	4			2
Do	Dec. 17.....	120,552	36					1					
Guatemala	Dec. 19.....	6,500	29					1					
Halifax.....	Dec. 31.....	38,700	18						1				
Hamburg.....	Dec. 10.....	661,015	202								1		8
Do	Dec. 17.....	661,015	208					1		1			3
Hamilton, Bermuda.....	Dec. 27.....	16,000	0										
Havre	Dec. 10.....	119,472	91								29		1
Hongkong	Nov. 19.....	248,710	90							1			
Do	Nov. 26.....	248,710	84					1					
Kingston, Canada.....	Dec. 30.....	18,800	5										
Konigsberg.....	Dec. 19.....	179,686								1			
La Paz, Mexico.....	Dec. 17.....	5,000	0										
Leeds.....	do.....	416,618	134						1	3	7	1	
Leghorn	Dec. 18.....	104,509	41								1		
Leipsic.....	Dec. 10.....	422,071	129								1		
Do	Dec. 17.....	422,071	125							2	6		

a Grippe the prevailing disease. No mortality.

b Grippe prevailing. Some deaths.

MORTALITY TABLE, FOREIGN CITIES—Continued.

Cities.	Week ended.	Estimated popula- tion.	Total deaths from all causes.	Deaths from—									
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.	
Leith.....	Dec. 17.....	76,277	27						1				
Licata.....	Dec. 10.....	20,000	12					4					
Do.....	Dec. 17.....	20,000	12					5					
Liege.....	Dec. 10.....	168,595	51				1						1
Do.....	Dec. 3.....	168,595	55					1			2		
Liverpool.....	Dec. 17.....	668,645	244					5	1	6	10		1
Livingston, Guatemala.....	Dec. 24.....	1,500	0										
London, England.....	Dec. 17.....	6,408,321	1,866					28	6	61	33		36
Lyons.....	Dec. 10.....	456,028	172					5	1				
Madras.....	Dec. 2.....	452,518	372	2		1						3	
Magdeburg.....	Dec. 3.....	224,433	70							1	2	3	1
Manchester.....	Dec. 17.....	541,296	213					3		1	2	14	
Mannheim.....	Dec. 10.....	110,856	24								1		
Mayence.....	do.....	76,984	24										
Do.....	Dec. 17.....	76,984	17										
Messina.....	Dec. 10.....	107,000	32										
Do.....	Dec. 17.....	107,000	29										
Monterey.....	Dec. 8.....	25,000	61			1		1	2				
Do.....	Dec. 15.....	25,000	48									2	
Do.....	Dec. 22.....	25,000	42					1				1	
Motewideo.....	Nov. 19.....	215,061	64										
Do.....	Nov. 26.....	215,061	60							1			
Moscow.....	Dec. 10.....	1,000,000	572			3	1	3	11	9	4		4
Munich.....	Dec. 3.....	430,000	181							4			2
Do.....	Dec. 10.....	430,000	227					2		6			2
Do.....	Dec. 17.....	430,000	86							1	5		2
New Castle on Tyne.....	do.....	223,000	57							1	2		1
Nice.....	Dec. 18.....	108,227	46					2			1		
Nuremberg.....	Dec. 3.....	194,515	72					1					1
Do.....	Dec. 10.....	194,515	79					1		1			4
Odessa.....	Dec. 9.....	400,600	138			1			4	4	4		1
Do.....	Dec. 17.....	400,600	151				1	2	4	6			
Ottawa.....	Dec. 24.....	60,000	11										
Do.....	Dec. 31.....	60,000	21										
Palermo.....	Dec. 10.....	300,000	115							3			
Do.....	Dec. 17.....	300,000	100						1	2			
Paris.....	do.....	2,511,955	887					4	1	2			6
Plymouth.....	do.....	99,136	33								1		
Prague.....	Dec. 10.....	196,257	128					1	2	7	2		
Puerto Cortés.....	Dec. 28.....	2,000	0										
Quebec.....	Dec. 24.....	73,000									1		1
Do.....	Dec. 31.....	73,000								1			
Rheims.....	Dec. 10.....	108,943	41					1		1			1
Rio de Janeiro.....	Nov. 25.....	750,000	a261					1			2		
Do.....	Dec. 2.....	750,000	b258		2	3		4			1		
St. Johns, West Indies.....	Dec. 17.....	15,000	14										
Do.....	Dec. 24.....	15,000	21										
St. Stephen, New Brunswick.....	Dec. 31.....	3,000	0										
St. Petersburg.....	Dec. 10.....	1,267,023	560					14	14	21	8		12
St. Thomas, West Indies.....	Dec. 2.....	12,019	5										
Do.....	Dec. 10.....	12,019	6										
Do.....	Dec. 17.....	12,019	6										
Sheffield.....	do.....	360,960	126					7	1	6	2		
Smyrna.....	Dec. 11.....	300,000	38			2							
Southampton.....	Dec. 17.....	100,886								4			1
South Shields.....	do.....	98,922	31						1		4		
stettin.....	Dec. 10.....	150,000	55					2					
Do.....	Dec. 17.....	150,000	45						1				
Stockholm.....	Dec. 10.....	283,550	75							4	2		1
Do.....	Dec. 17.....	283,550	91							4	2		1
Stuttgart.....	Dec. 15.....	162,934	62										
Sunderland.....	Dec. 10.....	143,819	63					2	1		2		1
Do.....	Dec. 17.....	143,819	60					1	1				2
Trapani.....	Dec. 10.....	45,085	17										
Do.....	Dec. 17.....	45,085	21										
Trieste.....	Dec. 10.....	165,000	58					2	4	1			
Do.....	Dec. 17.....	165,000	80					2	8	1			
Tuxpan.....	Nov. 26.....	10,280	14										
Do.....	Dec. 3.....	10,280	19										
Do.....	Dec. 10.....	10,280	17										
Venice.....	Dec. 11.....	169,001	61					1		5			

a Beriberi, 1.

b Beriberi, 3.

MORTALITY TABLE, FOREIGN CITIES—Continued.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—									
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.	
Vera Cruz.....	Dec. 29.....	30,000	44		3								
Vienna.....	Nov. 26.....	1,606,629	570					2	5	8	5		
Do.....	Dec. 3.....	1,606,629	523					1	2	14	8	3	
Warsaw.....	do.....	601,408	257			3	5		25	8	11	3	3
Do.....	Dec. 10.....	601,408	257					6	17		8	3	3
Do.....	Dec. 17.....	601,408	250			7			26	5	4		
Windsor, N. S.....	Dec. 31.....	3,000	0										
Yokohama.....	Dec. 2.....	189,455	(a)							1			
Do.....	Dec. 9.....	189,455								1			
Zurich.....	Dec. 10.....	162,233	49				1						4
Do.....	Dec. 17.....	162,233	50						1	1			2

a dysentery.

By authority of the Secretary of the Treasury :

WALTER WYMAN,
Supervising Surgeon-General U. S. Marine-Hospital Service.